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Bradshaw et al.

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[54] LAMINATING AND ADHESIVE TRANSFER APPARATUS

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100/176; 242/156; 242/419.9

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60; 100/155 R, 176; 425/363; 242/156,
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[56] References Cited

U.S. PATENT DOCUMENTS

2,647,299	8/1953	Thomas	492/47 X
3,309,983	3/1967	Dresser	156/555 X

3,737,359	6/1973	Levitian	156/522
3,901,758	8/1975	Humphries	156/499
4,151,900	5/1979	Kirwan	188/174
4,387,000	6/1983	Tancredi	156/555 X
4,619,728	10/1986	Brink	156/555

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[57] ABSTRACT

A multi-purpose laminating and adhesive transfer apparatus having a frame supporting rotatably engaging nip rollers. The frame and has upper and lower feed rolls which may be a laminate, film or paper, or an adhesively coated film or a film having an affinity for adhesive. The upper and lower feed rolls containing the webs of laminating or adhesive transfer material have tensioning caps which can be adjusted to provide the proper tensioning to prevent the rollers from overrunning as they rotate. The tensioning caps are pre-set and provided to the user. A cutter blade is positioned at the discharge side of the nip rollers and may be actuated to sever the master at any desired location. The apparatus may be operated to apply lamination to either top or bottom surfaces of a substrate.

18 Claims, 4 Drawing Sheets

